

Appn. No. 10/645,432
Amendment dated July 28, 2004
Reply to Office Action mailed June 7, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims (deleted text being struck through and added text being underlined):

1 1. (Currently Amended) A shock force indicating device
2 comprising:
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member;
7 a bearing disposed within said cavity; and
8 a pressure sensitive material disposed on said base member;
9 wherein movement of said bearing over said pressure sensitive
10 material produces a visually identifiable path on said pressure sensitive
11 material tracing movement of said bearing when said bearing moves in
12 response to a shock force on said device;
13 wherein said base member and said top member provide a
14 compressive force to said bearing such that said bearing is held in place
15 until said device is subjected to a shock force greater than a
16 predetermined threshold.

2. (Cancelled)

1 3. (Original) The shock force indicating device according to claim
2 1, wherein a bottom surface of said base member comprises an adhesive
3 backing.

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1 4. (Original) The shock force indicating device according to claim
2 1, wherein said bearing has an initial starting position which is
3 substantially centered within a plane of said base member within said
4 device between said base member and said top member.

1 5. (Currently Amended) The shock force indicating device
2 according to claim 2 1, wherein said top member has a substantially flat
3 top portion.

1 6. (Currently Amended) The shock force indicating device
2 according to claim 2 1, wherein said top member is dome-shaped.

1 7. (Currently Amended) The A shock force indicating device
2 according to claim 1, comprising:
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member;
7 a bearing disposed within said cavity; and
8 a pressure sensitive material disposed on said base member;
9 wherein movement of said bearing over said pressure sensitive
10 material produces a visually identifiable path on said pressure sensitive
11 material tracing movement of said bearing when said bearing moves in
12 response to a shock force on said device;
13 wherein said bearing is disposed within an indentation in said base
14 member under an initial condition, said bearing traveling out of the
15 indentation when said device is subjected to a sufficient shock force.

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1 8. (Currently Amended) The A shock force indicating device
2 according to claim 1, further comprising:
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member;
7 a bearing disposed within said cavity; and
8 a pressure sensitive material disposed on said base member;
9 wherein movement of said bearing over said pressure sensitive
10 material produces a visually identifiable path on said pressure sensitive
11 material tracing movement of said bearing when said bearing moves in
12 response to a shock force on said device;
13 a spring, one end of said spring being connected to the base
14 member at a substantially centered location on the top surface of said
15 base member, an other end of said spring being connected to said
16 bearing, said spring adapted to allow a predetermined amount of
17 movement of said bearing when said device is subjected to a shock force
18 of a particular magnitude.

1 9. (Original) The shock force indicating device according to claim
2 8, wherein said bearing and said spring are formed from a single piece of
3 an elastic material.

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1 10. (Currently Amended) The A shock force indicating device
2 according to claim 1, further comprising:
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member;
7 a bearing disposed within said cavity; and
8 a pressure sensitive material disposed on said base member;
9 wherein movement of said bearing over said pressure sensitive
10 material produces a visually identifiable path on said pressure sensitive
11 material tracing movement of said bearing when said bearing moves in
12 response to a shock force on said device;
13 an elastic member, one end of said elastic member being connected
14 to said base member at a substantially centered location on the top
15 surface of said base member, an other end of said elastic member being
16 connected to said bearing, said elastic member adapted to extend to
17 allow movement of said bearing when said device is subjected to a shock
18 force of a particular magnitude.

1 11. (Original) The shock force indicating device according to
2 claim 1, wherein said pressure sensitive material is pressure sensitive
3 paper.

1 12. (Currently Amended) The shock force indicating device
2 according to claim 11 claim 11, wherein said pressure sensitive paper is
3 carbon paper.

1 13. (Original) The shock force indicating device according to
2 claim 1, wherein said top member is substantially transparent.

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1 14. (Original) The shock force indicating device according to
2 claim 1, wherein said base member comprises indicating marks
3 representing a scale with which to measure a component of a shock force
4 on said device.

1 15. (Original) The shock force indicating device according to
2 claim 14, wherein said indicating marks are substantially concentric
3 circles.

1 16. (Original) The shock force indicating device according to
2 claim 1, wherein said device has a substantially circular perimeter.

17. (Cancelled)

1 18. (Currently Amended) A shock force indicating device
2 comprising:
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member; and
7 a bearing disposed within said cavity;
8 wherein said bearing is formed of a material capable of visually
9 marking said base member such that said bearing traces a path which has
10 a length corresponding to a base component of a force applied on said
11 device;
12 wherein said base member and said top member provide a
13 compressive force to said bearing such that said bearing is held in place
14 unless said device is subjected to a shock force greater than a
15 predetermined threshold.

19. (Cancelled)

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1 20. (Currently Amended) ~~The~~ A shock force indicating device
2 according to claim 18, further comprising:
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member;
7 a bearing disposed within said cavity; and
8 a spring, one end of said spring being connected to the base
9 member at a substantially centered location on the top surface of said
10 base member, an other end of said spring being connected to said
11 bearing, said spring adapted to allow a predetermined amount of
12 movement of said bearing when said device is subjected to a shock force
13 of a particular magnitude;
14 wherein said bearing is formed of a material capable of visually
15 marking said base member such that said bearing traces a path which has
16 a length corresponding to a base component of a force applied on said
17 device.

1 21. (Original) The shock force indicating device according to
2 claim 20, wherein said bearing and said spring are formed from a single
3 piece of an elastic material.

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1 22. (Currently Amended) The A shock force indicating device
2 ~~according to claim 18, further comprising:~~
3 a base member having a substantially flat top surface;
4 a top member having a raised portion disposed in spaced relation
5 above said base member forming a cavity between said top member and
6 said base member;
7 a bearing disposed within said cavity; and
8 an elastic member, one end of said elastic member being connected
9 to the base member at a substantially centered location on the top
10 surface of said base member, an other end of said elastic member being
11 connected to said bearing, said elastic member adapted to extend to
12 allow movement of said bearing when said device is subjected to a shock
13 force of a particular magnitude;
14 wherein said bearing is formed of a material capable of visually
15 marking said base member such that said bearing traces a path which has
16 a length corresponding to a base component of a force applied on said
17 device.

1 23. (Original) The shock force indicating device according to
2 claim 18, wherein the base member has indicating marks representing a
3 scale with which to measure a component of a shock force on said
4 device.

24. through 32. (Cancelled)

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Please add the following new claims:

1 33. (New) A shock force indicating device comprising:
2 a base member having a top surface;
3 a top member having a raised portion disposed in spaced relation
4 above said base member forming a cavity between said top member and
5 said base member;
6 a bearing disposed within said cavity; and
7 a pressure sensitive material disposed on the top surface of said
8 base member such that movement of said bearing over said pressure
9 sensitive material produces a visually identifiable path on said pressure
10 sensitive material tracing movement of said bearing when said bearing
11 moves in response to a shock force on said device;
12 wherein said top member has a concave lower surface such that a
13 distance between the top surface of said base member and the concave
14 lower surface of said top member decreases in a radially outward
15 direction from a substantially centered position on the top surface of
16 said base member so that movement of said bearing outwardly from a
17 substantially centered position on said base member requires
18 progressively greater shock force on said device.

1 34. (New) The shock force recording device according to claim 33
2 wherein said distance between the top surface of said base member and
3 the lower surface of said top member at said substantially centered
4 position is substantially equal to a diameter of said bearing.